

✓ = reviewed

JMF

3/8/07

**EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	11	(US-20030225848-\$ or US-20030177195-\$ or US-20040047461-\$).did. or (US-6453294-\$ or US-6430604-\$ or US-6175857-\$ or US-6404438-\$ or US-7089278-\$ or US-6493028-\$ or US-6219045-\$ or US-6119147-\$). did.	US-PGPUB; USPAT	OR	ON	2007/03/08 08:45
L3	8	L2 and (hide or disable or show or remove)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/08 09:58
L4	95	microsoft.as. and (avatar or (personal\$7 adj entity))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/08 09:59
L5	5	microsoft.as. and (avatar or (personal\$7 adj entity)).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/08 09:59
L6	6	microsoft.as. and (avatar or (personal\$7 near2 entity)).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/08 10:01
L7	0	microsoft.as. and (personalized near2 entity).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/08 10:02
L8	7	(personalized near2 entity).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/08 10:02
L11	3	"luk, karen".in. or "czeisler, adam". in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/08 10:06
L12	0	"luk, karen".in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/08 10:06

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L15	0	"entity representation with adjustable content"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/08 10:07
S1	984	709/207.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 10:33
S2	59	709/207.ccls. and (((graphical or virtual or animated or personalized) adj represent\$7) or emote or emoticon or avatar)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 12:16
S3	2	"6430604".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 10:49
S4	2	"6453294".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 10:49
S5	101	(((graphical or virtual or animated or personalized) adj represent\$7) or avatar) and (chat or instant adj messag\$4) and ((receiv\$4 or accept\$4) near3 invit\$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:27
S6	42	(((graphical or virtual or animated or personalized) adj represent\$7) or emote or emoticon or avatar) and (chat or instant adj messag\$4) same ((receiv\$4 or accept\$4) near3 invit\$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 13:04
S7	26	(((graphical or virtual or animated or personalized) adj represent\$7) or avatar) and (chat or instant adj messag\$4) same ((receiv\$4 or accept\$4) near3 invit\$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 13:06
S8	4	(((graphical or virtual or animated or personalized) adj represent\$7) or avatar) and (chat or instant adj messag\$4) same ((receiv\$4 or accept\$4) near3 invit\$6) and cache	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 14:29

## EAST Search History

S9	195	((graphical or virtual or animated or personal\$4) adj represent\$7 or avatar or entity)) and (chat or instant adj messag\$4) and ((receiv\$4 or accept\$4) near3 invit\$6) and cache	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 14:31
S10	61	((graphical or virtual or animated or personal\$4) adj (represent\$7 or avatar or entity))) and (chat or instant adj messag\$4) and ((receiv\$4 or accept\$4) near3 invit\$6) and cache	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 14:41
S11	2	((graphical or virtual or animated or personal\$4) adj (represent\$7 or avatar or entity))) and (chat or instant adj messag\$4) and ((receiv\$4 or accept\$4) near3 invit\$6) and cache and (launch near3 service)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 14:33
S12	101	((graphical or virtual or personal\$4) adj (represent\$7 or avatar or entity))) same (chat or instant adj messag\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 14:42
S13	8	(hide or show or disable) with (((graphical or virtual or personal\$4) adj (represent\$7 or avatar or entity))) same (chat or instant adj messag\$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 14:44
S14	38	(hide or show or disable) with (((graphical or virtual or personal\$4) adj (represent\$7 or avatar or entity))) and ActiveX	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 14:45
S15	65	(share) with (((graphical or virtual or personal\$4) adj (represent\$7 or avatar or entity)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 14:45
S16	29	(share) near4 (((graphical or virtual or personal\$4) adj (represent\$7 or avatar or entity)))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 14:45
S17	3	(instant adj message) and (context with sensitive with commands with menu)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 15:26

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S18	0	(instant adj message) same (context with sensitive with commands)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 15:26
S19	0	(instant adj message) same (context with sensitive with command)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 15:27
S20	36	((instant adj message) or chat or IM) and (context with sensitive with command)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 15:27
S21	8	(US-20030177195-\$ or US-20030225848-\$ or US-20040047461-\$).did. or (US-6175857-\$ or US-6430604-\$ or US-6453294-\$ or US-6404438-\$ or US-7089278-\$).did.	US-PGPUB; USPAT	OR	ON	2007/03/07 16:15
S22	4	S21 and (cache or caching or (unique near2 (id or identifier or name)) or (file near2 extension))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:25
S23	5	(cache or caching) with (avatar) same (instant adj messag\$8 or IM)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:26
S24	36	three near2 character with file adj extension	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:28
S25	6	(cache or caching) with (avatar) and (instant adj messag\$8 or IM)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:26
S26	81	((((graphical or virtual or animated or personalized) adj represent\$7) or avatar) with (cache or caching)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:31

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S27	6	((((graphical or virtual or animated or personalized) adj represent\$7) or avatar) with (cache or caching) and (instant adj messag\$7)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:29	✓
S28	1	(three near2 character) with (file adj extension) with (id or identify or identifier)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:28	✓
S29	8	((((graphical or virtual or animated or personalized) adj represent\$7) or avatar) with (cache or caching) and (IM or instant adj messag\$7)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:29	
S30	23	((((virtual or animated or personalized) adj represent\$7) or avatar) with (cache or caching)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:31	
S31	22	avatar same (cache or caching)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/07 16:32	

802.11g have the same preamble with the same time period (Figs.2, 3 and 4, especially elements 210, 212 and 214). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the Wakamatsu's timing synchronization circuit to identify the symbol boundary since the IEEE 802.11a and IEEE 802.11g have the same preamble with the same time period.

- With regard claim 23, which is an apparatus claim related to claim 9, all limitation is contained in claim 9. The explanation of all the limitation is already addressed in the above paragraph.

6. Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wakamatsu (US 2004/0052319) in view of Ryan (US 7,065,036).

- With regard claim 12, Wakamatsu discloses all of the subject matter as described in the above paragraph except for specifically teaching wherein the timing synchronization occurs at a network access point.

However, Ryan teaches wherein the timing synchronization occurs at a network access point (column 3 lines 10-40).

It is desirable to have an infrastructure network uses an access point for allocating the transmit time for all stations. Communication between any two stations is established via the access point. The access point further is used to handle traffic from any station to the wired or wireless backbone of the wider network, e.g., an intranet or the Internet. This arrangement allows for coordination of all of the stations in the basic service area and ensures proper

handling of the data traffic. Typically, infrastructure wireless local area networks (WLANs) provide better throughput performance than ad hoc networks, and also provide greater scalability. Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the system as taught by Ryan in which the timing synchronization occurs at a network access point, into Wakamatsu's 802.11a communication system so as to provide better throughput performance than ad hoc networks.

- With regard claim 16, Wakamatsu discloses a demodulator (Fig.12 elements 10661-16667) to deliver the packet symbols (Fig.12 element 10666 and 10665, outputs, sy\_re and sy\_im) to the auto-correlator and cross-correlator.

Wakamatsu discloses all of the subject matter as described in the above paragraph except for specifically teaching a delay line, the delay line having a plurality of pipelined registers for receiving samples of an incoming packet, and having outputs to provide sample values to the auto-correlator and cross-correlator.

However, Ryan teaches a delay line (Fig.5 element 507 and column 8 lines 7-12), the delay line having a plurality of pipelined registers (column 8 lines 7-12) for receiving samples of an incoming packet (Fig.5 element 503 output) in order to read out the delay line output in a higher speed so that the symbol synchronization speed can be improved. Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the apparatus as taught by Ryan in which having a delay line having a plurality of

pipelined registers, into Wakamatsu's symbol synchronization identification circuit between input signal (Fig.12 elements 10666 and 10665, outputs, sy\_re and sy\_im) and auto-correlation (Fig.14 element 10901) and cross-correlation elements (Fig.14 element 10902) so as to improve synchronization speed.

***Allowable Subject Matter***

7. Claims 14 and 27 are allowed.
8. Claims 3-7, 10, 11, 17-21, 24-26 are objected to as being dependent upon an objected claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. The following is an examiner's statement of reasons for allowance.
  - The prior art fails to teach an apparatus of Claims 14 and 27 that specifically comprises the following:
    - The instant application is deemed to be directed to a non-obvious improvement over the admitted prior art of the instant application and the invention patented in Pat. No. US 7,065,036, US 7,061,427 and US 2004/0052319. The improvement comprises that "performing a cross-correlation between samples of an incoming packet and a standard preamble and processing the results by discarding a number of the most recent cross-correlation values, locating a number of maximum peaks in the remaining cross-correlation values, then repeatedly selecting a maximum peak occurring earliest in time as the symbol timing boundary unless any of the remaining maximum peaks occurs a certain distance of



cross-correlation values or more away, until a maximum peak has been identified as a symbol timing boundary near the first approximation." as recited in combination with other limitation as claimed.

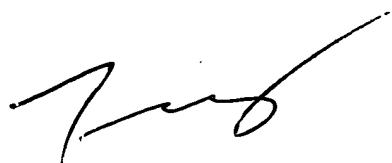
**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is 571-272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ted M. Wang



Ted M Wang  
Examiner  
Art Unit 2611